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Docket No. 266836US0PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Michael BENDER, et al.

SERIAL NO: 10/526,045

GAU:

FILED: February 28, 2005

EXAMINER:

FOR: INTEGRATED PROCESS FOR THE SYNTHESIS OF PROPYLENE OXIDE

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

■ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.

☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

☐ Attached is a list of applicant's pending application(s), published application(s) or issued patent(s) which may be related to the present application. In accordance with the waiver of 37 CFR 1.98 dated September 21, 2004, copies of the cited pending applications are not provided. Cited published and/or issued patents, if any, are listed on the attached PTO form 1449.

☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

■ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO.	SERIAL NO.
		266836US0PCT	10/526,045
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT	
		Michael BENDER, et al.	
		FILING DATE	GROUP
		February 28, 2005	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5 599 956	02/04/97	PUJADO et al.			
	AB	4 788 371	11/29/88	IMAI et al.			
	AC	5 220 091	06/15/93	BRINKMEYER et al.			
	AD	5 430 220	07/04/95	KHARE et al.			
	AE	5 877 369	03/02/99	WU et al.			
	AF	3 798 283	03/19/74	BITAR et al.			
	AG	4 886 928	12/12/89	IMAI et al.			
	AH	5 430 209	07/04/95	AGASKAR et al.			
	AI	5 530 171	06/25/96	AGASKAR et al.			
	AJ	5 527 979	06/18/96	AGASKAR et al.			
	AK	5 563 314	10/08/96	AGASKAR et al.			
	AL	4 009 252	02/22/77	IZUMI et al.			
	AM	5 500 202	03/19/96	GERMAIN et al.			
	AN	4 336 238	06/22/82	DALTON, Jr. et al.			
	AO	4 336 239	06/22/82	DALTON, Jr. et al.			
	AP	4 389 390	06/21/83	DALTON, Jr. et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	TRANSLATION NO
	AQ	00/20404	04/13/00	WO		NO
	AR	00/10961	03/02/00	WO (with English abstract & equivalent of US 6426433)		NO
	AS	02/085875	10/31/02	WO		NO
	AT	101 37 543	02/13/03	DE (equivalent of US 2004/0192946)		NO
	AU	101 35 296	01/30/03	DE (equivalent of US 2004/0192945)		NO
	AV	101 05 527	08/08/02	DE (equivalent of US 2004/0068128)		NO
	AW	100 32 885	01/17/02	DE (equivalent of US 2003/0146080)		NO
	AX	99/46039	09/16/99	WO		NO
	AY	0 705 136	04/10/96	EP		NO
	AZ	99/29420	06/17/99	WO (with English abstract & equivalent of US 6414209)		NO
	AAA	0 117 146	08/29/84	EP		NO
	AAB	199 37 106	02/08/01	DE		NO
	AAC	199 37 106	02/08/01	DE		NO
	AAD	199 37 107	02/08/01	DE (equivalent of US 6670303)		NO
	AAE	195 30 454	02/20/97	DE		NO

■ Additional References sheet(s) attached

Examiner | Date Considered

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		Michael BENDER, et al.	
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	TRANSLATION NO
	AAF	198 37 517	02/24/00	DE (equivalent of US 6426433)		NO
	AAG	98/55430	12/10/98	WO (with English abstract & equivalent of US 6518441 & US 2002/0120158)		NO
	AAH	102 11 275	09/25/03	DE (equivalent of US 2004/0242925)		NO
	AAI	100 28 582	12/20/01	DE (equivalent of US 6781017, US 2003/0181762 & US 2003/0187299)		NO
	AAJ	92/04277	03/19/92	WO		NO
	AAK	0 579 109	01/19/94	EP (equivalent of US 5500202)		NO
	AAL	0 946 409	10/06/99	EP (equivalent of US 6375920 & US 2001/0003578)		NO
	AAM	101 05 528	08/08/02	DE (equivalent of US 2004/0048329)		NO
	AAN	100 32 884	01/24/02	DE (equivalent of US 6756503 & US 2003/0144535)		NO
	AAO	101 55 470	05/22/03	DE		NO
	AAP	100 10 139	06/13/01	DE (equivalent of US 6498436 & US 2002/0011809)		NO
	AAQ	197 23 950	12/10/98	DE (equivalent of US 6518441 & US 2002/0120158)		NO
	AAR	102 32 406	01/29/04	DE (equivalent of US 2004/0014591)		NO
	AAS	198 35 907	02/17/00	DE (equivalent of US 6479680)		NO
	AAT	100 01 401	07/19/01	DE (equivalent of US 6712942 & US 2003/0004387)		NO

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AAU	SANFILIPPO, Domenico et al. "Fluidized Bed Reactors for Paraffins Dehydrogenation", Chemical Engineering Science, vol. 47, no. 9-11, pages 2313-2318 1992
	AAV	
	AAW	
	AAX	
	AAY	
	AAZ	

Examiner	Date Considered

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U.S. PCT Application Serial No.: 10/526,045
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STATEMENT OF RELEVANCY

1) References AA, AQ-AS have been cited in the International Search Report. Copies of these references are being submitted herewith only when not automatically provided by the International Searching Authority.

2) References _____ have been cited in the corresponding _____ Search Report. A copy of these references is being submitted herewith.

3) References AB-AP, AT-AAU are discussed in the specification. A copy of these references is being submitted here with.

4) References _____ are additional prior art known to Applicant. A copy of these references is being submitted herewith.

AAB DE 199 37 106 (Abstract of corresponding document EP 1 074 299):
Multi-component catalysts (I) containing (a) platinum and tin, (b) gallium, indium, cobalt and/or germanium, (c) optionally scandium, yttrium and/or lanthanum and (d) optionally alkali and/or alkaline earth metals, on a zirconium oxide support which may also contain silicon dioxide, aluminum oxide and/or titanium dioxide. An Independent claim is also included for a process for the dehydrogenation of 2-16C hydrocarbons in presence of (I) and optionally in presence of water vapor.

AAC DE 199 37 105 (Abstract of corresponding document EP 1 074 298):
New catalysts (I) contain: (a) 10-99.9 wt.% of zirconium dioxide and/or titanium dioxide; (b) 0.1-30 wt.% of silicon dioxide; (c) 0-60 wt.% of aluminum oxide; and (d) 0.1-10 wt% of group Ia or IIb element(s), group IIIb element(s), group VIIIb element(s) and/or tin. Independent claims are also included for (1) a process for the dehydrogenation of 2-16C hydrocarbons in presence of (I) and optionally in presence of water vapor; (2) a process for the production of (I) from suitable compounds of Zr and/or Ti and Al and/or Si by dry mixing or atomizing together, then calcining and palletizing (optionally with the addition of acid); (3) a process for the production of (I) by atomizing or dry mixing suitable compounds of Zr and/or Ti and Si and calcining the mixture, mixing with suitable Al

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STATEMENT OF RELEVANCY

Cont...
AAC DE 199 37 105 (Abstract of corresponding document EP 1 074 298): compounds with the addition of acid, palletizing with the addition of acid, impregnating with a solution containing platinum and tin, drying, calcining at 400-650 degrees C, impregnating with an aqueous solution containing potassium and cesium, drying and calcining again at 400-650 degrees C.

AAE DE 195 30 454:
In continuous oxidative dehydrogenation of C3H8 to C3H6 with (gas contg.) O2 at 500-600, pref. 530-570 deg C and a C3H8 partial pressure > 0.02 bar, pref. > 0.1 bar and a C3H8/O2 partial pressure ratio of 0.1-10, pref. 0.1-2, the heterogeneous catalysts used are mixed oxides of the type Mel-Bi-Mo-O mixed with a second mixed oxide of the type B-Mell-O; in which Mel = Zn, Mg or Ca; Mell = Al, Zr, Ti and Zn.

AAO DE 101 55 470:
A method for the synthesis of propylene oxide (PO) by epoxidation of propene with recovery of unreacted propene, in which propene is recovered from part or all of the off-stream by (i) addition of nitrogen, (ii) compression, (iii) condensation, (iv) gas permeation and (v) separation. An Independent claim is also included for apparatus for use in this method, comprising a nitrogen feed, a compression unit, a condensation unit, an organophilic membrane unit and a separation unit.